LISTING OF CLAIMS

1. – 104. (Canceled)

105. (Presently amended) A method for analyzing a biological sample, the method comprising the steps of:

illuminating a sample with ~~using an optical assembly comprising a movable mirror to focus~~ electromagnetic radiation ~~on sequential regions of said sample; wherein said optical assembly comprises a sheath for transmitting said electromagnetic radiation to said sample~~;

collecting ~~with said optical assembly,~~ electromagnetic radiation emanating from ~~said~~ sequential regions of said sample, ~~thereby to associate said sequential regions with collected electromagnetic radiation emanating therefrom~~ wherein said emanating electromagnetic radiation is substantially confocal with electromagnetic radiation provided in said illuminating step; and

analyzing said collected electromagnetic radiation in order to determine characteristics of said sequential regions. ~~based upon features of said collected electromagnetic radiation.~~

106. (Presently amended) The method of claim 105, wherein said illuminating step comprises focusing said illuminating radiation on said sample using a movable mirror. ~~is a beam splitter.~~

107. (Presently amended) The method of claim 105, wherein said collecting step comprises focusing said emanating radiation on a detector using a ~~second~~ movable mirror.

108. (Previously presented) The method of claim 105, wherein said analyzing step comprises detecting said emanating radiation and comparing emanating radiation obtained from a region of said sample to a standard.

109. (Previously presented) The method of claim 105, wherein said sample is biological tissue.

110. (Previously presented) The method of claim 109, wherein said biological tissue is cervical tissue.

111. (Previously presented) The method of claim 105 further comprising the step of diagnosing a disease state based upon a comparison of said emanated electromagnetic radiation to one or more standards indicative of various states of health.

112. (Cancelled)

113. (Previously presented) The method of claim 105, wherein predetermined wavelengths of said emanating electromagnetic radiation are selected for analysis in said analyzing step.

114. (Previously presented) The method of claim 105, wherein said illuminating step comprises illuminating substantially all of said sample.

115. (Presently amended) The method of claim 105, wherein said illuminating and emanating electromagnetic radiation pass through a sheath ~~is a single-use disposable sheath~~.

116. (Presently amended) The method of claim 108, wherein ~~said detecting step comprises~~ an array of detectors detects said emanating radiation.

117. (Previously presented) The method of claim 116, wherein said array of detectors comprises optical elements and processors.

118. (Presently amended) The method of claim 107, wherein said ~~second~~ movable mirror comprises a beam splitter to split said emanating radiation into a plurality of individual wavelengths.

119. (Previously presented) The method of claim 118, wherein said beam splitter is a spectrometer.

120. (Previously presented) The method of claim 105, further comprising the step of controlling a field stop in order to probe a volume element of said sample.

121. (Presently amended) The method of claim 120, wherein said field stop has a dimension that is large compared to a quotient formed by division of a wavelength of said emanating

electromagnetic radiation by a numerical aperture of an ~~said~~ optical assembly used to illuminate said sample.

122. (Previously presented) The method of claim 120, wherein said controlling step comprises controlling an array of field stops in order to probe a volume element of said sample.

123. (Presently amended) The method of claim 120, wherein said field stop is controlled by ~~said~~ a movable mirror.

124. (Presently amended) The method of claim 105, wherein said sample is illuminated using a plurality of ~~said~~ movable mirrors.

125. (New) The method of claim 106, wherein said mirror is a beam splitter.

126. (New) The method of claim 115, wherein said sheath is a single-use disposable sheath.

127. (New) A method for analyzing a biological sample, the method comprising the steps of:

illuminating a sample with electromagnetic radiation;

collecting electromagnetic radiation emanating from sequential regions of said sample;

analyzing said collected electromagnetic radiation in order to determine characteristics of said sequential regions; and

controlling a field stop in order to probe a volume element of said sample.

128. (New) The method of claim 127, wherein said illuminating step comprises focusing said illuminating radiation on said sample using a movable mirror.

129. (New) The method of claim 127, wherein said collecting step comprises focusing said emanating radiation on a detector using a movable mirror.

130. (New) The method of claim 127, wherein said analyzing step comprises detecting said emanating radiation and comparing emanating radiation obtained from a region of said sample to a standard.

131. (New) The method of claim 127, wherein said sample is biological tissue.

132. (New) The method of claim 131, wherein said biological tissue is cervical tissue.

133. (New) The method of claim 127 further comprising the step of diagnosing a disease state based upon a comparison of said emanated electromagnetic radiation to one or more standards indicative of various states of health.

134. (New) The method of claim 127, wherein said emanating electromagnetic radiation is substantially confocal with electromagnetic radiation provided in said illuminating step.

135. (New) The method of claim 127, wherein predetermined wavelengths of said emanating electromagnetic radiation are selected for analysis in said analyzing step.

136. (New) The method of claim 127, wherein said illuminating step comprises illuminating substantially all of said sample.

137. (New) The method of claim 127, wherein said illuminating and emanating electromagnetic radiation pass through a sheath.

138. (New) The method of claim 130, wherein an array of detectors detects said emanating radiation.

139. (New) The method of claim 138, wherein said array of detectors comprises optical elements and processors.

140. (New) The method of claim 129, wherein said movable mirror comprises a beam splitter to split said emanating radiation into a plurality of individual wavelengths.

141. (New) The method of claim 140, wherein said beam splitter is a spectrometer.

142. (New) The method of claim 127, wherein said field stop has a dimension that is large compared to a quotient formed by division of a wavelength of said emanating electromagnetic radiation by a numerical aperture of an optical assembly used to illuminate said sample.

143. (New) The method of claim 127, wherein said controlling step comprises controlling an array of field stops in order to probe a volume element of said sample.

142. (New) The method of claim 127, wherein said field stop is controlled by a movable mirror.

145. (New) The method of claim 127, wherein said sample is illuminated using a plurality of movable mirrors.

146. (New) The method of claim 128, wherein said mirror is a beam splitter.

147. (New) The method of claim 137, wherein said sheath is a single-use disposable sheath.